

For the Royal College of Surgeons

7.

from the COPY of the Author

A LETTER

TO THE

EDITOR OF THE "ASSOCIATION MEDICAL JOURNAL,"

RELATIVE TO THE

REPORT ON THE CHOLERA

WHICH ATTACKED THE

FLEET IN THE BLACK SEA,

PUBLISHED BY

SIR WILLIAM BURNET,

NAVAL MEDICAL DEPARTMENT.

G.
D. M. Boulton

c
PRINTED BY

T. RICHARDS, 37, GREAT QUEEN STREET.

1855.

“From researches at the bed side, before death, and from researches by autopsy, after death, it has been shown that it is as impossible for an individual to be suddenly seized with Cholera, and to be deprived of life by the disease, without a premonitory diarrhœa, as it is impossible for an individual to die of hæmorrhage without having a vein or an artery open.”

REPORT ON CHOLERA IN THE BLACK SEA FLEET;
CAN THE ATTACK OF CHOLERA BE SUDDEN?

LETTER FROM D. MACLOUGHLIN, M.D.

SIR,—I have read the Report on the cholera which attacked the fleet in the Black Sea in August 1854, published by the Naval Medical Department; and, as everything coming from such a source claims attention from the profession, will you permit me through your JOURNAL to notice some pathological points relative to cholera in that Report, which appear to require explanation.

In that Report, it is stated, “that men, in perfect health, were roused from sleep by severe cramps, and other unmistakable symptoms of cholera”; “that others were brought from various parts of the ship, and even from the yards, where they had been attacked while reefing”; and “that others fell as if they had drunk of the concentrated poison of the upas-tree”.

There cannot be a doubt that such cases of apparent sudden attacks as these stated did occur in the ships in the Black Sea. But were these men perfectly healthy and free from diarrhoea when they went to bed, or when they were attacked in various parts of the ship, or when they went aloft, or before they fell as if they had drunk the concentrated poison of the upas tree? It has been fully ascertained by accurate researches at the bedside, and by accurate researches by autopsy after death,

that every case of cholera is preceded by a diarrhoea for a few hours, a few days, or a few weeks;* and every medical practitioner, who has attended to epidemic cholera, has met with cases where the individual's skin is quite blue, cold, and clammy; his tongue icy cold; his features shrunk; who, however, is walking about, or at his usual occupation, in the full possession of his mental faculties, unconscious that he has anything serious the matter with him; and who will even say that he feels as strong as ever, except that he cannot speak loud.

Yet it is known to every pathologist that epidemic diarrhoea has drained almost the whole serum from this person's blood; and that his blood has ceased to circulate; and that his heart has ceased to beat;+ and that still this person has not as yet had one single symptom of spasm, or one single symptom pathognomonic of what heretofore has been called cholera: and every medical practitioner here in London, who has attended to epidemic cholera, knows of such persons having fallen down suddenly, as if they had drunk a deadly poison (while, I repeat, they were walking about, or at their usual occupation, unconscious they were ill), and racked by spasms, &c.,—by cholera.

Consequently, with the knowledge of these facts before us,—

* See Result of an Inquiry into the Invariable Existence of a Premonitory Diarrhoea in Cholera.

See the Report from St. Thomas's, St. Bartholomew's, the Westminster the Homœopathic, the University College, and the St. Mary's Hospital, where it is stated that every case of cholera admitted in each of these hospitals had a premonitory diarrhoea.

See the Register at Poplar Union, which contains 872 cases, which have occurred in that union during the last five years, and six and thirty (36) medical practitioners have certified that each had a premonitory diarrhoea.

See all the Reports of Autopsies of Cholera cases, and where in every case no fecal matter is found in the intestines, which proves that it had been carried off by an active action on the bowels.

+ I have opened the temporal and the brachial artery, and no blood flowed, and no beating of the heart could be heard.

It is impossible to admit that men in perfect health, and free from diarrhœa, were suddenly roused from their sleep by cramps, and by the other unmistakeable symptoms of cholera.

It is impossible to admit that others in perfect health, and free from diarrhœa, were suddenly seized by an attack of cholera, in any part of the ship, or when aloft, reefing.

And it is also impossible to admit that others, also in perfect health, and free from diarrhœa, were suddenly attacked by cholera, and fell as if they had drunk the concentrated poison of the upas tree.

And, consequently, it must be concluded that these cases, reported as cases of sudden attacks of cholera, were cases hurriedly and superficially inquired into: and it is to be regretted that they are put forth as the result of careful and minute investigations at the bedside.

The next question in that Report which claims attention is the statement that cholera and diarrhœa depend on different causes; "that choleraic disease depends on a specific cause which is not endemic, and diarrhœa on a cause which is endemic".

Heretofore cholera has been considered to manifest itself only at the moment when the individual was seized with vomiting, spasms, etc. The diarrhœa which was sometimes remarked to precede an attack of vomiting, spasms, etc, was considered to be no part of the disease; that it only weakened the individual, and made him liable to be acted on by the choleraic poison. It follows, therefore, that, if cholera is independent of diarrhœa, well-authenticated cases must abound of persons in perfect health, and free from diarrhœa, having been suddenly seized with vomiting, spasms, etc.; with cholera, in fact.

But heretofore not one single well-authenticated case of

cholera without a premonitory diarrhœa has been discovered; and, from researches at the bedside before death, and from researches by autopsy after death, it has been shown that it is as impossible for an individual to be suddenly seized with cholera, and to be deprived of life by the disease, without a premonitory diarrhœa, as it is impossible for an individual to die of hæmorrhage without having a vein or an artery open. And, consequently, cholera is the result of diarrhœa, and, therefore, is not an idiopathic disease; and, consequently, the same cause which causes diarrhœa will cause cholera.

But does diarrhœa depend on an endemic cause only? Wherever epidemic cholera has prevailed, epidemic diarrhœa has also prevailed; and we have the proof here before us in the Report, that, at the same time that epidemic diarrhœa prevailed in London, in France, in the Baltic, in America, etc., it also prevailed in the fleet in the Black Sea. Therefore, it is impossible to admit that a disease which raged at one and the same time over thousands of miles can have an endemic cause only.

Besides, there is another circumstance which has heretofore escaped attention, and which marks that an epidemic abnormal state of the digestive functions precedes an outbreak of epidemic diarrhœa. At p. 13 of the *Result of an Inquiry into the Invariable Existence of a Premonitory Diarrhœa in Cholera*, it is stated "that, before epidemic diarrhœa breaks out, there is a change which takes place in the health of every individual of the community. Their stomachs and bowels are more easily deranged by the slightest irregularity in diet, and diarrhœa thereby induced. Every one has borborygmi—and especially when in bed—between one and five in the morning. Those who usually require laxatives, now do not require them; and half, one-third, or one-fourth the usual dose will have the same

effect now as a full dose at other times: and a full dose given to a person in perfect health will now induce diarrhœa, followed by cholera and death. (See case viii in the *Result of an Inquiry*, etc.) And the same full dose, given to persons labouring under other diseases than diarrhœa or cholera, has induced diarrhœa, followed by cholera, and destroyed life.* Since the attention of the medical profession was called to this epidemic abnormal state of the stomach and bowels of the whole population previous to an outbreak of epidemic diarrhœa, Dr. Babington has also called the attention of the profession to the same subject; and Dr. Williams, of Swansea, has given it the very appropriate denomination of the premonitory to the premonitory diarrhœa.

Consequently, there can be no doubt of the existence of this epidemic abnormal state of the stomach and bowels of the whole population, where epidemic diarrhœa is about to break out; and, consequently, the Report is in error when it asserts that diarrhœa depends on an endemic cause only.

The next question in the Report which requires explanation is, that it is stated that the disease (cholera) was brought to Varna and to Baljick by vessels coming from infected places, and having the disease on board. The fact is fully proved that epidemic cholera is preceded, accompanied, and followed by epidemic diarrhœa; and that every case of cholera is preceded by a diarrhœa for some hours, some days, or some weeks. And it is also established that epidemic diarrhœa is itself preceded by an epidemic abnormal state of the stomach and bowels, affecting the whole population. Therefore, before it can be admitted that cholera, which is itself only the consequence of diarrhœa

* See the Report of Four Cases to whom Laxatives were administered at St. George's Hospital, and where diarrhœa and cholera were induced in each, and which proved fatal to one. (Medical Times, Sept. 1854.)

has been imported into a country, it must be shown that the population of that country was not at the time labouring under the abnormal state of the functions of the stomach and bowels, nor under epidemic diarrhœa; and, as the Report before us does not show that such an inquiry as this—to ascertain the state of health of the population—not even that of the ships, was undertaken, we must refuse our assent that the disease (cholera) was imported into Varna or into Baljiek.

In conclusion, however, after having read the last paragraph of the Report, where the means to ward off an attack, and the means to cure the attack when it has come on, are pointed out, we cannot but feel grateful to the head which has directed, and to the hands which have carried out, such judicious measures.

I am, etc., D. MACLOUGHLIN,
Member of the Legion of Honour.

34, Bruton Street, Berkeley Square, London, Jan. 18th, 1855.